Scott. Ti.-27—100,000—21-5-48.

Development (1948) Department

M5 SERIES.

G.O. No. 3665

Dated 9-7-1948.

[Despatch Abstract.]

CINCONA : QUININE AND OTHER PRODUCTS : TREE CHECK OF QUALITY REPORT FOR THE HALF YEAR ENDED 31st December 1947 : RECORDED

From
Lt.Col.G.S.Gill, C.I.E.,O.B.E.,
M.B.,Ch.B.,
Inspector-General of Prisons,
Madras.

To
The Secretary to Government,
Development Department,
Madras.

No. 142/W-1/48 dated the 20th January 1948.

Sir,

Sub: CINCHONA - Qunine and other products - Test check of quality - Report forwarded.
Ref: Paragraph 2 of G.O.(Ms) No. 4458 Dev. dated 19-10-1944.

I forward herewith a copy of report on the Test Check of quality of smples of quinine and other products received from the manufacturing Chemist, Government Quinine Factory, Naduvattam, for the half year ended 31st December 1947.

Sd/ G.S.Gill (Lt.Col)
Inspector-General of Prisons.

Report on the Test Check of quality of samples of Cinchona products taken from the Central Jail, Coimbatore, by the Inspector-General of Prisons, Madras, in November 1947 and sent to the Manufacturing Chemist, Government Quinine Factor Naduvattam, under cover of his reference No. G.4027/47 dated 15/16th November 1947.

PINK QUNINE SULPAHTE:

(a) Appearance.	Pink, Crystalline.
(b) Limit of readily carbonisable matter.	
1, Sulphuric acid	Pale Yellow colour produced
2. Nitric acid	Faint yellow colour produced.
(c) Limit of inorganic salts and other alkaloids	Negligible amount of foreign matter present.
(d) Limit of other alkaloids (Kerner's test)	Clears with 49 c.c. of 10 per cent Ammonia at 15°C (B.P.allows 6.5.cc)
(e) Moisture	15.1 per cent.
(f) Ash	Negligible.

Remarks: The sample conforms to B.P. Standard.

II. QUININE HYDROCHLORIDE.	
(a) Appearance.	Colourless cystale.
(b) Limit of readily carbonisable matter:	
1. Sulphuric Acid	Faint Yellow
2. Nitric acid.	Faint Yellow
(c) Limit of Inorganic salts and other alkaloids	Very negligible amount of foreign matter present.
(d) Flourescence test.	A.4% W/v solution is not flourscent.
(e) Limit of Barium	Within limits
(f) Limit of Sulpahte	Within limits
(g) Limit of other alkaloids (Kerner's test)	Clear with 5.8 c.c. of 10% ammonia a 15° C (B.P. allows 6.5.cc).
(h) Moisture	9.4 per cent.
(i) Ash	Negligible.

Remarks: The sample conforms to B.P. Standard.

III. CINCHONA FEBRIFUGE:	
(a) Appearance	Light brown powder
(b) Moisture	4.2 per cent
(c) Ash	5.2 per cent
(d) Chemical Analysis	
Quinine	13.9 per cent
Cinchonidine	15.0 per cent
Cinchonine	18.8 per cent
Quinidine	5.7 per cent
Residual amophous alkaloids	18.6 per cent.

Remarks: Conforms to our usual standard excepting the ash content which is slightly higher than the prescribed limit of 5 per cent.

IV. TOTAQUINA.

(a) Appearance.	Pale brown power
(b) Maisture	7.0%
(c) Ash	3.0%
(d) Chemical Analysis:	
Quinine	17.9%)
Cinchonidine	19.8%) Total crystallisable
*Cinchonine	26.2%) alkaloids 70.1%.
Residual alkaloids(Amorphous)	12.4%)
*Quinidine.	6.2%)

Remarks: The sample conforms to B.P. standard excepting the moisture content which is higher than the prescribed limit of 5 per cent.

V. PINK QUININE SULPHATE - TABLETS:

(1) Apperance.	Good
(2) Compression:	Hard compressed.
(3) Weight of one tablets.	4.71 grains(should be 5.00)grains
(4) Dosgage	3.98 grains (should be 4.00) "
(5) Time taken for disintergration in water.	15 to 60 second.

VI. CINCHONA FEBRIFUGE TABLETS:

(1) Apperance.	Good
(2) Compression	Hard compressed.
(3) Weight of one tablet	5.29 grains (should be 5.2 grains)
(4) Dosgar	3.90 grains (should be 4.0grains)
(5) Time taken for disintegration in water.	15 to 80 second.

VII TOTAQUINA TABLETS:

(1) Apperance.	Good
(2) Compression	Hard compressed.
(3) Weight of one tablet	5.20 grains (should be 5.2 grains)
(4) Dosage	3.85 grains (should be 4.0 grains)
(5) Time taken for disintegration in water.	60 to 160 second.

VIII. QUNINEHYDROCHOLORIDE TABLETS.

(1) Apperance.	Good
(2) Compression	Hard compressed
(3) Weight of one tablet	5.14 grains (should be 5 grains)
(4) Dosgge-	3.94 grains (should be 4.0 grains)
(5) Time taken for disintegration in water	25 to 80 seconds.

IX. QUININE HIHYDROCHOLRODIDE AMPOULES:

(1) Manufacturer	Messrs.Hind Chemicals, Cawnpore
(2) Colour of solution in ampoules.	Brownish yellow
(3) Quinine Bihydrochloride content:	6.05 grain in 1 c.c.(claim made is 6.0 grains in 1.cc)
(4) Quinine content (in 1/2 gm. of alkaloid)	0.01 gms.

From
A.Y.Swamy, Esq., M.A.,M.Sc.,(Techn)
(Manchester),
Director, Cinchona Department,
Ootacamund.

To
The Secretary to Government,
Development Department,
Fort St. George,
Madras.

Rc. No. 3616-A2/47 dated 31st January 1948.

Sir,

Sub: QUININE - Quinine and other products - Test check of quality - Report for the half-year ended 31st December 1947.

I have the honour to forward herewith a report on the test-check of quality of cinchona products, samples of which were taken by me at the Quinine Factory during December 1947 and to state that I have no special remarks to offer thereon.

I have the honour to be,
Sir,
Your most obedient servant.

Sd/.for Director.

Report on the Test Check of quality of samples of Cinchona products taken from the Government Quinine Factory, Naduvatam, by the Director, Cinchona Department, Ootacamund, in December 1947 and handed over to the Manufacturing Chemist in person on 13-12-1947.

I. SAMPLE A - TOTAQUINA TABLETS.

1. Appearance.	Good.
2. Compression.	Hard compressed.
3. Weight of one tablet.	5.15 grain (should be 5.20 grain)
4. Dosage	3.95 grains (should be 4.00 grains)
5.Time taken for disintegration in water.	60 to 120 second.

II.SAMPLE B - PINK QUININE SULPHATE - ~~POWDER~~.POWDER.

(a) Apperance.	Pink, Crystalline.
(b) Limit of readily carbonisable matter:	
(1) Sulphuric acid.	Pale yellow colour produced
(2) Nitric acid	Faint yellow colour produced
(c) Limit of Inorganic salts and other alkaloids	Minute traces of foreign matter presents.
(d) Limit of other alkaloids (Kerner's Test)	Clears with 6.3 c.c. of 10% Ammonia at 15°C (B.P. allows 6.5 c.c.)
(e) Moisture	10.8 per cent.
(f) Ash	Negligible.

Remarks: Conforms to B.P. Standard excepting (c) where there is evidence of slight dirt.

III. SAMPLE C. TOTAQUINA - POWDER.

(a) Apperance.	Pale brown power	
(b) Moisture	3.6 per cent	
(c) Ash	3.9 per cent	
(d) Chemical Analysis:		
Quinine	17.4 per cent)	
Cinchonidine	20.6 per cent)	
~~Quinidine~~ Chichonine	27.1 per cent)	Total crystallisable
~~Residual amorpheus alkaloids~~	)	alkaloids - 70.4 %
Quinidine	5.3 per cent)	
Residual amorphous alkaloids	14.5 per cent)	

Remarks: The sample conforms to B.P. Standard.

Sd/ T.N. ANANTHANARAYANAN.
18.1.1948
Manufacturing Chemist, Govt.
Quinine Factory, Naduvattam.

From
A.Y, Swamy, Esq., M.A.,M.Sc., Tech.(Manchester),
Director, Cinchona Department,
Ootacamund.

To
The Secretary to the Government of Madras,
Development Department,
Fort St. George, Madras.

Rc.No.3616/A2/47 dated 9th April 1948.

Sir,

Sub: QUININE - Quinine and other products - Test check of quality of samples of quinine products taken by the Inspector-General of Prisons, Madras - Report for the half year ended 31st December 1947.
Ref: Memorandum No.7656-K/48.3 Dev. dated 25th February 1948

I have the honour to offer my remarks as follows in the matter.

2. In the report of the Manufacturing Chemist on the test check of samples of quinine products taken by the Inspector General of Prisons from the Central Jail, Coimbatore, the ash in Cinchona Febrifuge has been indicated as 5.2 per cent against the limit of 5 per cent fixed by the department. The Manufacturing Chemist was informed that he should take care to see that furture consignments of cinchona febrifuge have an ash content of below 5 per cent. He has replied that every care will be taken to see that future consignments of the drug have an ash content of below 5 per cent.

3. It is also seen from the report that Totaquina has a moisture content of seven per cent and so the drug should be considered as below B.P. standard. In this connection the Manufacturing Chemist states that the laboratory record book maintained at the factory shows that no consingment of totquina with a moisture content of seven per cent was despatched from the quinine factory to the Central Jail, Coimbatore during the years 1946-47 and 1947-48. The Inspector-General of Prisons is, however, being addressed to furnish particulars of the consignment from which the sample was drawn by him at the Jail, so that the consignment may be got back from the Jail, redried and despatched to the Jail. A further report to Government on this subject will be submitted in due course.

I have the honour to be,
Sir,
Your most obedient servant,

Sd/. Director,Cinchona Deptt.

GOVERNMENT OF MADRAS
Abstract.

CINCHONA - Qhinine and other products - Test check of quality - Report for the half year ended 31st December 1947 - Recorded with remarks.

- -

Development Department.

G.O. (Ms) No. 3665. Dated, the 9th July 1948

READ - the following:-

Letter from the Inspector-General of Prisons, Madras, No. 142/W1-48 dated the 20th January 1948.

From the Director of Cinchona Department, Rc. No.3616-A2/47 dated the 31st January 1948, the 9th April 1948 and the 17th June 1948

ORDER:

R e c o r d e d.

2. The Director, Cinchona Department, is requested to take immediate steps to ensure that the cinchona febrifuge powder manufactured at the Quinine Factory at Naduvattam conforms to B.P. standard.

3. The report of the Inspector-General of Prisons on the test check of quality of quinine and other products drawn from the Central Jail, Coimbatore, indicates that totquina power has a moisutre content of 7 per cent. TheDirector, Cinchona Department has explained that the consignment must have been exposed to the atmosphere for a long time. The Superintendent, Central Jail, Coimbatore, is requested to take steps to ensure that the drug is not exposed to the atmosphere. The Director Cinchona Department should also e ensure that no consignment of tetoquina powder is despatched to the Central Jail, Coimbatore with a moisture content higher than the prescribed limit.

(By order of His Excellency the Governor)

W.R.S. SATTHIANADHAN
Secretary to Government.

To the Director, Cinchona Department, Ootacamund.
To the Inspector-General of Prisons, Madras.
To the Superintendent, Central Jail, Coimbatore.

/True copy/

Superintendent,
Madras Record Office, Egmore.
24/9.